

In the Specification:

On page 1, after the title insert the following:

## **RELATED APPLICATIONS**

This is a U.S. national stage of application No. PCT/DE2004/002603, filed on 24 November 2004.

On page 1, before line 11, insert the following:

## **FIELD OF THE INVENTION**

The present invention is directed to a radiation-emitting optoelectronic component which is connected to a heat sink and is intended for pulsed operation.

## **BACKGROUND OF THE INVENTION**

On page 2, amend the paragraph beginning on line 7 as follows:

$\Delta T(t)$  is the temperature change, that is to say the difference between the instantaneous temperature and the initial temperature at the time  $t$ ,  $t_1$  and  $t_2$  being the associated switching times for a temperature increase and a temperature decrease, respectively.  $\Delta T_\infty$  is the limiting value of the temperature increase, toward which  $\Delta T(t)$  would converge for  $t \rightarrow \infty$ . This limiting value would be reached, for instance, in the case of a relatively long operating time in cw (continuous wave) operation (i.e., continuous operation in contrast to a pulsed operation).

On page 3, before line 2, insert the following heading:

## **SUMMARY OF THE INVENTION**

On page 3, amend the paragraph beginning on line 2 as follows:

~~The invention is based on the object of providing~~ One object of the present invention is to provide an optoelectronic component having a heat sink, in which the fluctuating mechanical loads which result from pulsed operation are reduced. ~~Furthermore, a method for producing said component is to be specified.~~

Another object is to provide such a component.

On page 3, delete the paragraph beginning on line 8 through line 13 in its entirety.

On page 3, amend the paragraph beginning on line 15 as follows:

~~According to the invention, in the case of~~ These and other objects are attained in accordance with one aspect of the present invention directed to a radiation-emitting optoelectronic component which is connected to a heat sink and is intended for pulsed operation with the pulse duration  $D$ , and in which temperature changes of the optoelectronic component take place with a thermal time constant  $\tau$  during pulsed operation, the thermal time constant  $\tau$  is matched to the pulse duration  $D$  in order to reduce the amplitude of the temperature changes.

The amplitude of the temperature changes is understood as meaning the difference between the highest and lowest temperature of the optoelectronic component during a pulse. The thermal time constant is the constant  $\tau$  in the equations specified above for  $\Delta T(t)$ . In the case of a temperature profile which differs from these relationships, the thermal time constant  $\tau$  of an optoelectronic component is to be understood, in the context of the invention, as meaning the best approximation for  $\tau$ , which can be determined, for example, by matching the curve of the abovementioned equations to the actual temperature profile. When in doubt, the time which

corresponds to a temperature drop which has been extrapolated, if appropriate, to  $1/e$  times the initial temperature may be used for this purpose.

On page 6, delete the paragraph beginning on line 10 through line 12 in its entirety.

On page 6, before line 14, insert the following heading:

**BRIEF DESCRIPTION OF THE DRAWINGS**

On page 6, before line 29, insert the following heading:

**DETAILED DESCRIPTION OF THE DRAWINGS**